



November 20, 2003

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
236 Massachusetts Avenue, N.E., Suite 110  
Washington, DC 20002

RE: Ex Parte of Meeting between Dielectric Communications  
And FCC staff regarding the Second Periodic Review  
Of DTV Transition  
MB Docket No. 03-15, RM 9832

Dear Ms. Dortch,

This letter summarizes the November 19, 2003 meeting between the undersigned, representing Dielectric Communications, and Rick Chessen, Gordon Godfrey, Mary Beth Murphy, Eloise Gore, Peter Corea and Tom Horan of the Media Bureau.

This meeting was requested to discuss the status of the above MB Docket and, from a manufacturers standpoint, how the transition to DTV is proceeding. In advance, I had prepared a brief presentation to specifically address the following issues:

The DTV Maximization dates  
Selection of final channel of DTV operation  
Interim power levels  
Must Carry  
Ownership rulings  
Typical system costs

DTV Maximization dates: I was asked if the proposed maximization dates of July 1, 2005 and July 1, 2006 are realistic and achievable. I suggested that the capacity exists in the manufacturing community to accommodate this with little risk. However, to do so, the FCC must establish these deadlines sooner versus later keeping in mind the date for the selection of the final DTV channel.

Selection of final channel of operation: The May 1, 2005 date proposed leaves little time for the broadcaster to plan for full power, long term DTV service. It was recommended that consideration be given to a 2004 date to allow adequate planning time for the broadcasters, particularly those broadcasters who have both analog and digital channels that are out of core.

Interim power levels: The above referenced Docket mentions consideration of interim power levels. It is recommended that the Commission consider either interim power

levels (higher than those being implemented by some broadcasters operating on STA's) be adopted OR clarify the maximization rules to the marketplace. It is my opinion that since the First Periodic Review (November 2001) where the Commission relaxed the "build or lose" ruling, the broadcast community has assumed that maximization is a secondary issue. The Commission needs to either enforce maximization prior to the transition deadline OR establish an interim power level to offer clarity to the broadcaster. Without this clarity from the Commission, there is little motivation to drive the transition to digital. When considering stations that will revert back to their analog channel for future digital broadcasting, it was recommended that maximization not be required prior to the transition date yet the current analog contours be protected for the future digital transmission.

Must carry and ownership: I asked about the timing of the Commission's DTV must carry decision. I suggested that a quick decision was an important transition driver and that this is an integral part of the "hot switch" concept under consideration by the PBS community. I also explained that the equipment market was depressed in part due to a fact that broadcasters awaited a final resolution to the challenges surrounding the revised ownership rules. Broadcasters are unwilling to invest capital in their existing broadcast facilities when they are unsure if these same facilities will be part of their portfolio in the future.

Typical system costs: I generated typical passive RF system costs for full power VHF DTV service, low power UHF service, medium power UHF service and high power UHF service. These costs included "typical" antenna, transmission line, transmitter and RF system configurations and allowed a budgetary installation costs. In this, I identified "throw away costs," defined as the equipment that could not be transferred from an out of core facility to an in core facility (in the same band) but would rather need complete replacement. This equipment pricing is based on same power service at the in core channel and should a power upgrade be anticipated, these throw away costs would increase accordingly. Attached is a copy of my presentation on these points.

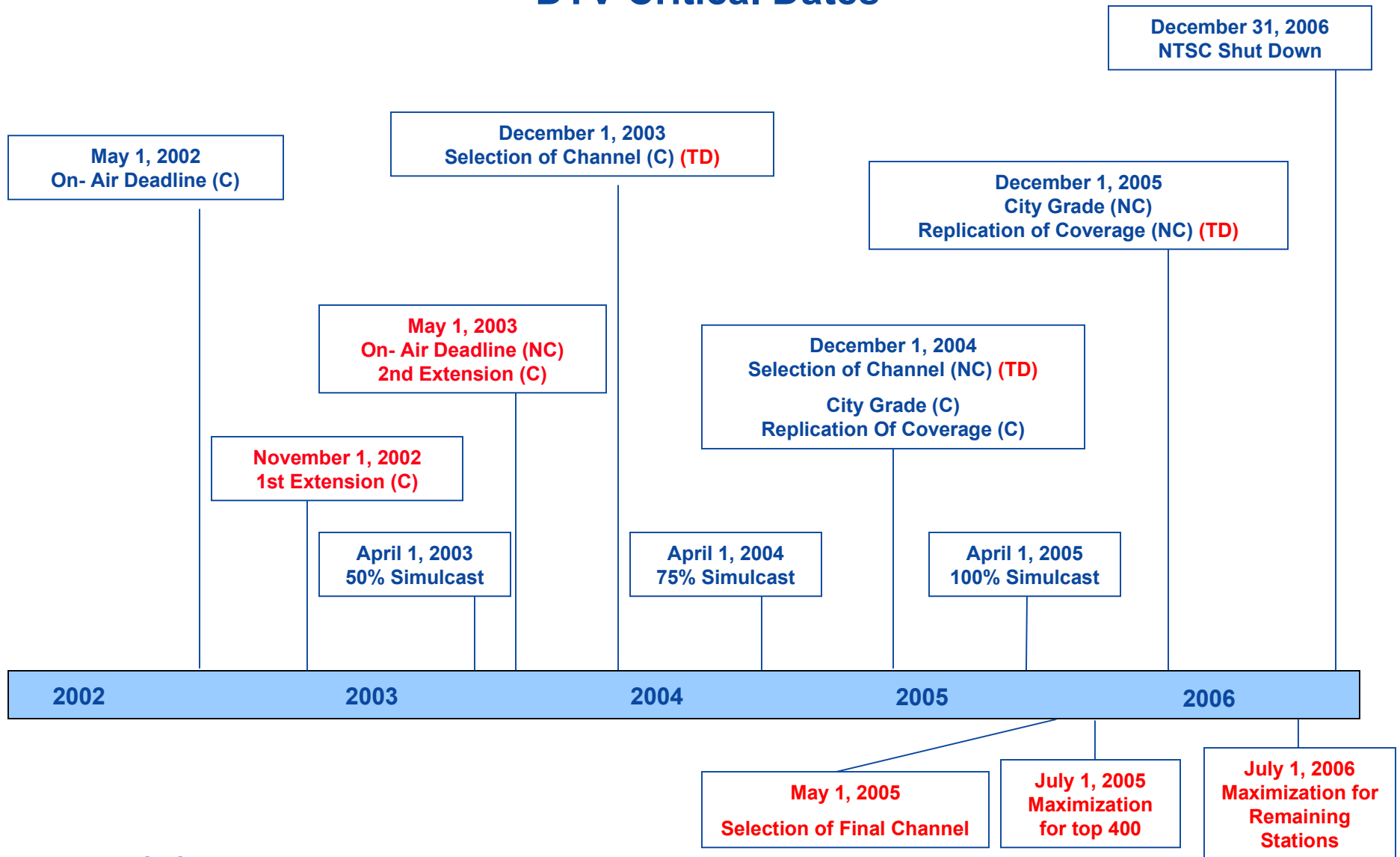
Should you have any further questions, feel free to contact me.

Sincerely,

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Vice President Marketing  
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cc (w): Rick Chessen  
Gordon Godfrey  
Mary Beth Murphy  
Eloise Gore  
Peter Corea  
Tom Horan

# DTV Critical Dates



(C)-Commercial  
(NC) Non-Commercial  
(TD) Temporarily Deferred

**Dielectric**

# NPRM Open Issues

- Date for Maximization
  - Original:
    - December 1, 2004 Commercial
    - December 1, 2005 Noncommercial
  - Proposed:
    - July 1, 2005 Top 400
    - July 1, 2006 Balance

# NPRM Open Issues

- Selection of Final Channel
  - Original:
    - December 31, 2003 Commercial
    - December 31, 2004 Noncommercial
  - Proposed:
    - May 1, 2005 All
  - Issues raised by delay:
    - Planning for out of core channels
    - Interference/maximization of all stations
      - If maximization deadline are as proposed above, stations must know final channels of all broadcasters in their market (and adjacent markets) **before** running interference analysis

# NPRM Open Issues

- Interim Power Levels:
  - Original plans were for stations to build at authorized ERP levels by the May 1, 2002 and May 1, 2003 deadlines.
  - First biennial review (November 2001) changed this to expedite the transition
    - Allowed for any minimum ERP
    - Result is over 500 stations operating on STA's at reduced power
  - Will the Commission propose interim power levels?
    - If so, will they use the 41dBu contour as baseline or will they look at a model considering the introduction of interference
    - Recommend higher power levels to allow for a sufficient level of service when interference is introduced
    - Additional research has been conducted on this subject and is ongoing. Dennis Wallace presented on this topic at the IEEE Broadcast Symposium last month

# Other

- Must Carry
  - Will this continue to be encouraged or will there be a ruling requiring dual carriage
  - PBS is considering hot switch to DTV. This would require significant DTV cable penetration
- Ownership
  - Is a yes or no expected in 2004?
    - This uncertainty is impacting customers ability and desire to invest capital in existing facilities
  - As the 2006 deadline approaches, analog system upgrades will be less likely
    - Do we expect 2006 to hold?



# VHF DTV Solutions

- High Band Full Power (Channels 7-13)
  - (20kW ERP)
    - TLS-V8 \$45K
    - 1000' 1-5/8" FLEXLine \$23K
    - Installation \$25-50K
    - “Outside Building” Cost: \$93-\$118K\*
    - 2kW TX and Filter \$150K
    - Total RF Plant Cost: \$243K-\$268K

\*Excludes any structural modifications to tower

# UHF DTV Solutions

- Low Power Array
  - (25kW ERP)
    - DL-12 Antenna \$11K
    - 1000' 1-5/8" FLEXLine \$23K
    - Installation \$30-80K
    - “Outside Building” Cost: \$64-\$114K\*
    - 2.5kW TX and Filter \$150K (\$23K throw away cost with channel change)
    - Total RF Plant Cost: \$214K-\$264K

Antenna, 40% of install cost and TX throw away costs approximately \$56K with change of channel

\*Excludes any structural modifications to tower

# UHF DTV Solutions

- Medium Power Array
  - (200kW ERP)
    - TFU-24DSB-B Antenna \$55K
    - 1000' 4-1/16" Rigid Line \$78K
    - Installation \$50-100K
    - “Outside Building” Cost: \$183-\$233K\*
    - 25 kW TX and Filter \$330K (\$65K throw away with channel change)
    - Total RF Plant Cost: \$513K-\$563K

Antenna, 40% of install cost and TX throw away costs approximately \$150K with change of channel

\*Excludes any structural modifications to tower

# UHF DTV Solutions

- Maximized Facilities
  - (1000kW ERP)
    - TFU-30GTH-R O4 Antenna \$231K
    - 1000' 8-3/16" Rigid Line \$234K
    - Installation \$100-250K
    - “Outside Building” Cost: \$565-\$715K\*
    - 50kW TX, Combiner and Filter \$540K (\$100K Throw Away with Channel Change)
    - Total RF Plant Cost: \$1105K-\$1255K

Antenna, 40% of install cost and TX throw away costs approximately \$390K with change of channel

\*Excludes any structural modifications to tower